

**2009-2010 Influenza Season (Season began 10/4/2009)**

**Synopsis:**

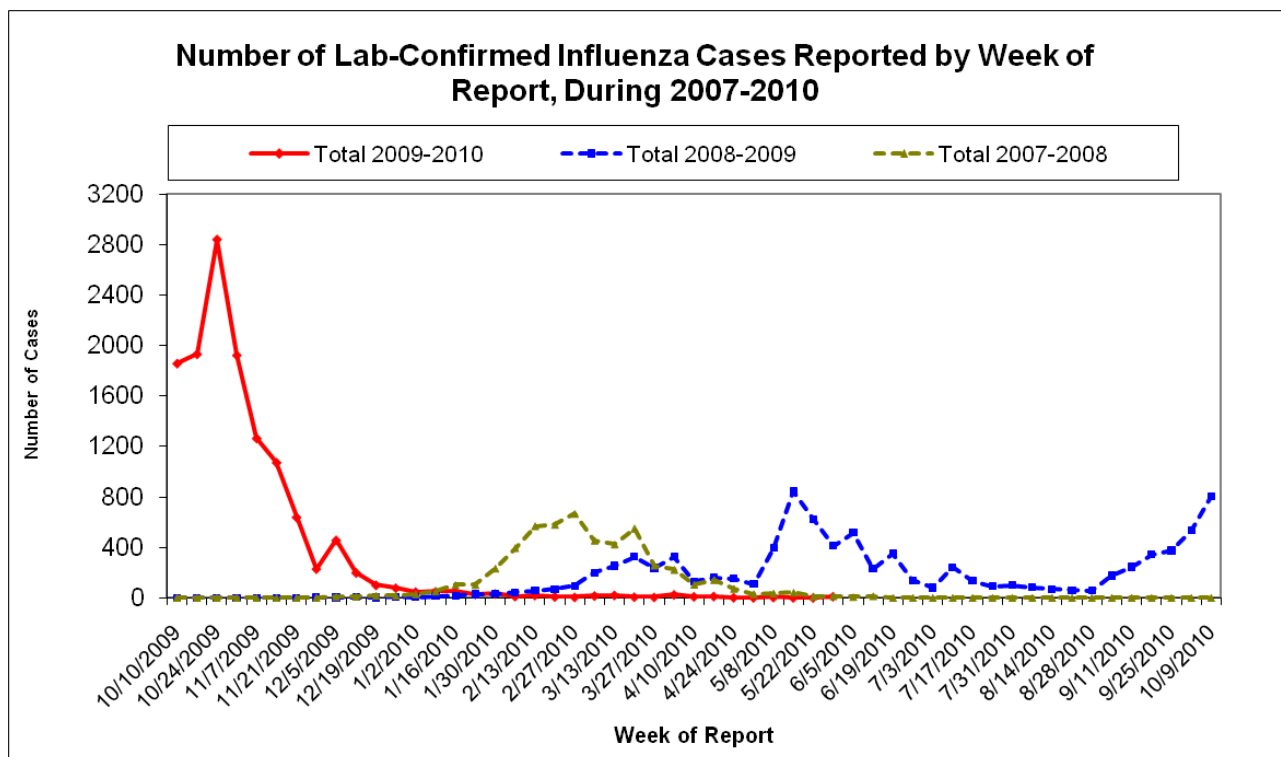
During the past week, influenza activity continued to be low and, as a result, Arizona's influenza activity remained at the "sporadic" activity level.

**Influenza activity highlights:**

- 13 laboratory-confirmed cases of influenza were reported in the past week. 9 of the 13 cases were diagnosed in 2009 but not reported to the state or local health jurisdiction until MMWR week 21; 1 laboratory-confirmed case of 2009 H1N1 influenza was identified during the previous week.
- 1 of the subtyped influenza viruses at the Arizona State Laboratory during the previous week was 2009 H1N1 influenza virus.
- No deaths associated with lab-confirmed 2009 H1N1 influenza virus were identified during the previous week; 151 deaths associated with the 2009 H1N1 influenza virus have been identified since April 2009.
- No lab-confirmed influenza-associated pediatric deaths were reported in the past week and 14 deaths have been reported for the current season. The 2009 H1N1 influenza virus was confirmed in all fourteen pediatric deaths.
- The cases included in this report represent a small proportion of the true number of cases of influenza. Many people do not visit the doctor when ill and doctors should not be expected to run tests on all patients exhibiting influenza-like symptoms.

**Laboratory-Confirmed Influenza Activity by Season [2007-2010]:**

Positive influenza tests are reported to ADHS. These include many types of test (rapid tests, culture, PCR, DFA, etc.). Many of these do not distinguish 2009 H1N1 influenza from other influenza strains.



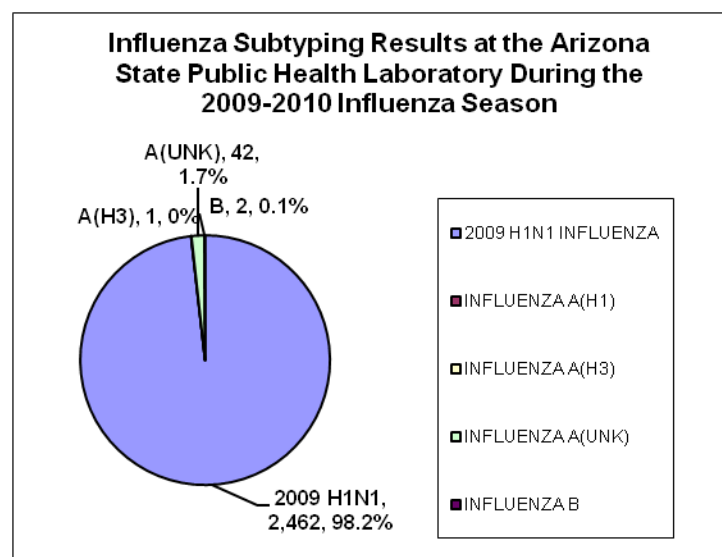
### Laboratory-Confirmed Influenza Activity by County [2009-2010 Influenza Season]:

County	Number of Laboratory-Confirmed Cases (Includes ALL reported lab-confirmed flu reports, regardless of subtype.)		Number of Laboratory-Confirmed 2009 H1N1 Influenza Cases (Includes ONLY cases that are confirmed to be H1N1 by the State Lab or other validated facilities.)		
	2009-2010 Season	Last Week	2009-2010 Season	Last Week	Total Since April 2009
Apache	185	9	28	0	87
Cochise	517	0	43	0	54
Coconino	316	0	81	0	165
Gila	65	0	25	0	52
Graham	600	0	14	0	23
Greenlee	3	0	3	0	3
La Paz	8	0	4	0	19
Maricopa	6,981	1	4,134	1	5,620
Mohave	351	0	279	0	349
Navajo	121	3	46	0	136
Pima	2,340	0	970	0	1,221
Pinal	721	0	429	0	544
Santa Cruz	75	0	28	0	45
Yavapai	461	0	178	0	199
Yuma	287	0	129	0	208
Unknown	0	0	0	0	0
<b>Total</b>	<b>13,031</b>	<b>13*</b>	<b>6,391</b>	<b>1</b>	<b>8,725</b>

\*9 of the 13 cases were diagnosed in 2009 but not reported to the state or local health jurisdiction until MMWR week 21

### Arizona State Public Health Laboratory (ASPHL) - Influenza Subtyping Data:

- In the past week, one specimen tested positive for influenza at ASPHL was confirmed to be the 2009 H1N1 influenza virus



## **Epidemiologic Information for confirmed 2009 H1N1 influenza cases since April 2009:**

	<b>Total Confirmed H1N1 Cases (N=8,726)</b>	<b>Identified H1N1 Hospitalizations (N=1,895)</b>	<b>Identified H1N1- Associated Deaths (N=151)</b>
<b>AGE</b>			
<b>Range</b>	0 days – 100 years	6 days – 96 years	4 months – 80 years
<b>Mean, Median</b>	23 years, 18 years	28 years, 24 years	42 years, 46 years
<b>AGE GROUP</b>			
<b>0 to 4 years</b>	1,312 (15%)	391 (21%)	5 (3%)
<b>5 to 18 years</b>	3,407 (39%)	406 (21%)	15 (10%)
<b>19 to 49 years</b>	2,964 (34%)	630 (33%)	66 (44%)
<b>50 to 64 years</b>	756 (9%)	339 (18%)	49 (32%)
<b>65 years or older</b>	231 (3%)	130 (7%)	16 (11%)
<b>Unknown age</b>	55 (1%)	0 (0%)	0 (0%)
		<b>Investigated H1N1 Hospitalizations** (N=1,409)</b>	<b>Investigated H1N1- Associated Deaths** (N=149)</b>
<b>MEDICAL HISTORY &amp; INFO</b>			
<b>At least 1 Underlying Medical Condition*</b>		878 (62%)	129 (87%)
<b>Pneumonia at Time of Hospital Admission</b>		584 (41%)	105 (70%)
<b>Intensive Care Unit Admission</b>		377 (27%)	123 (83%)
<b>Mechanical ventilation required</b>		241 (17%)	118 (79%)

\*Medical conditions include: asthma, chronic lung disease, chronic heart or circulatory disease, metabolic disease, cancer, pregnancy, immunosuppressive condition, neurologic disease, and other chronic diseases.

\*\*Investigations for identified H1N1 hospitalizations and deaths are ongoing. Pertinent data may not be collected for all identified cases at time of the report, so data presented above are only for investigated cases.

### **Glossary of Key Terms:**

**2009-2010 Influenza Season** – The season is defined by surveillance weeks. The first day of the 2009-2010 influenza season was October 4<sup>th</sup>, 2009, or week 40 and the 2009-2010 surveillance season will continue through October 2<sup>nd</sup>, 2010, or week 39.

**Sporadic Activity** – No increase in ILI activity and only an isolated number of laboratory-confirmed cases of influenza. Sporadic activity can also be defined by the absence of an increase in ILI activity and an outbreak of laboratory-confirmed influenza in one institution.

**Pneumonia and Influenza Mortality** – Many influenza-related deaths are due to complications of influenza infection, including pneumonia, and influenza is infrequently listed as the cause of death on death certificates. Surveillance from death certificates often uses the category of “pneumonia and influenza” as an indicator, although not all pneumonias are associated with influenza. See the CDC website for more information  
[http://www.cdc.gov/flu/about/disease/us\\_flu-related\\_deaths.htm](http://www.cdc.gov/flu/about/disease/us_flu-related_deaths.htm).

**Hospitalization** – A hospitalization, for purposes of 2009 H1N1 influenza investigations, is defined as a laboratory-confirmed 2009 H1N1 influenza case who has been admitted to the hospital for at least 24 hours.